



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,591	01/10/2002	Richard D. Heisey	73-96	5219

25542 7590 05/12/2004

CNH INTELLECTUAL PROPERTY LAW DEPARTMENT
CASE NEW HOLLAND INC.
P.O. BOX 1895
MS 641
NEW HOLLAND, PA 17557

EXAMINER

MAMMEN, NATHAN SCOTT

ART UNIT	PAPER NUMBER
----------	--------------

3671

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/041,591

Applicant(s)

HEISEY, RICHARD D.

Examiner

Nathan S Mammen

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,073,428 to Diekhans, cited in previous office action, in view of U.S. Patent No. 6,589,136 to Ephraim et al.

The Diekhans '428 patent discloses a combine harvester including threshing, cleaning, and separating systems. See. Fig. 1. The combine harvester includes wheels for propelling the harvester over the ground and an engine driving the wheels via a hydrostatic drive system. See Fig. 1 and col. 7, lines 5-12. The combine harvester includes an engine control circuit. See. Fig.

2. What the Diekhans '428 patent does not disclose is that the harvester includes an interconnected gear select lever, manual throttle control switch, and a speed modification switch.

The Ephraim '136 patent teaches that it is known in the art to provide an agricultural vehicle with a drive system comprising a gear selector (28), a manual throttle-control (col. 3, line 27) that sets a desired engine speed, a speed modification switch ("power boost" - col. 4, lines 10-13), and an engine control circuit (14) comprising a programmable microprocessor. The Ephraim '136 patent does not explicitly disclose that the gear selector is a gear select lever, but it is notorious to use levers to switch gears on agricultural combines. The speed modification switch has a first state and a second state. Movement of the gear selector switches the speed

Art Unit: 3671

modification switch from a first state to a second state and changes the gear ratio (col. 4, lines 10-13). The engine control circuit (14) is responsive to inputs from the throttle control and the speed modification switch for selectively controlling the engine to run at a first speed for a given position of the throttle control and when the speed modification switch is in the first state, i.e., the power boost is off. The engine controller selectively controls the engine to run at a second higher speed when the throttle control is in the given position and the speed modification switch is in the second position, i.e., the power boost is on (col. 4, lines 23-30). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the combine of the Diekhans '428 patent with the drive system control as taught by the Ephraim '136 patent, in order to provide a power boost for operating the combine at transport speeds (col. 2, lines 13-15).

Regarding claims 3-5, 7: The programmable microprocessor of the Ephraim '136 patent comprises means for storing road speed values in a table (col. 6, lines 37-40). Although the Ephraim '136 patent does not disclose providing a table for work speed values, in view of the overall disclosure of the Ephraim '136 patent, providing the microprocessor (14) with a table for work speed values when the speed modification switch is in the first state would be obvious and/or inherent. The table for road speed values increases the speed of the engine when the speed modification switch is in the second state. The output signal of the engine control circuit of the Ephraim '136 patent increases the rate of fuel flow to the engine. The road speed values correspond to engine values when the vehicle is operated to travel on the roadway (col. 4, lines 30-36). Conversely, when the vehicle is not in transport, the values are work speed values.

Regarding claim 6: The Dickhans '428 patent discloses that the engine control circuit includes a programmable microprocessor (6) and that the microprocessor is responsive to the threshing, cleaning, and separation system so the output power of the engine does not overload them. Col. 6, lines 10-64.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 3-6 have been considered but are moot in view of the new ground(s) of rejection.

As stated above, the Ephraim '136 patent teaches using a programmable microprocessor to control the engine speed in response to a speed modification switch. Thus, applicant's assertions about the deficiency of the Ushiro '427 patent are moot. The instant claims are still obvious.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 3671

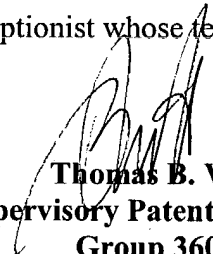
however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Mammen whose telephone number is (703) 306-5959.

The examiner can normally be reached Monday through Thursday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at (703) 308-3870. The fax number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-1113.



Thomas B. Will
Supervisory Patent Examiner
Group 3600

NSM
5/8/04

Nathan S. Mammen